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(12) **United States Patent**  
**Gosselin et al.**

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(54) **ARTICULATED LIMB FOR A ROBOT OR HAPTIC INTERFACE AND ROBOT AND HAPTIC INTERFACE COMPRISING AT LEAST ONE SUCH ARTICULATED LIMB**

(58) **Field of Classification Search**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 462 days.

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(57) **ABSTRACT**

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CPC ..... **B25J 17/00** (2013.01); **E05D 1/00** (2013.01); **Y10S 901/28** (2013.01); **Y10T 29/49826** (2015.01); **Y10T 74/20329** (2015.01)

A jointed limb comprising at least first (2) and second (4) rigid segments and a joint (6) providing rotation of the first and second segments with respect to each other about an axis of rotation (Y), said joint (6) comprising fibers, wherein each of the segments (2, 4) comprises a body (8.1, 8.2) and an end element (10.1, 10.2) provided at an end of said body, both end elements (10.1, 10.2) being held facing each other by said joint (6), said end elements (10.1, 10.2) comprising tapered profiles having vertices facing each other, each of said end elements (10.1, 10.2) being made prior to being secured it to the corresponding body (8.1, 8.2).

**20 Claims, 12 Drawing Sheets**

